

03/15/11



## **Technical Report for**

**GEI Consultants, Inc.** 

**Canton Airport Canton MA** 

09382-2

**Accutest Job Number: M92371** 

**Sampling Date: 06/16/10** 

#### Report to:

**GEI Consultants, Inc.** 

LLombardo@geiconsultants.com

**ATTN: Leslie Lombardo** 

Total number of pages in report: 22



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Reza **4** and Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) ISO 17025:2005 (L2235) This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.

## **Sections:**

-1-

**Table of Contents** 

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	4
Section 3: Sample Results	
<b>3.1:</b> M92371-1: 093822-HS-AH-5	6
<b>3.2:</b> M92371-2: 093822-HS-AI-5	7
<b>3.3:</b> M92371-3: 093822-HS-AJ-5	8
<b>3.4:</b> M92371-5: 093822-HS-AU-8	9
<b>3.5:</b> M92371-6: 093822-HS-AT.5-7.5	10
<b>3.6:</b> M92371-9: 093822-HS-AV.5-15.5	11
Section 4: Misc. Forms	12
4.1: Chain of Custody	13
<b>4.2:</b> MCP Form	15
4.3: Sample Tracking Chronicle	16
Section 5: GC Semi-volatiles - QC Data Summaries	18
5.1: Method Blank Summary	19
5.2: Blank Spike/Blank Spike Duplicate Summary	
5.3: Matrix Spike/Matrix Spike Duplicate Summary	
5.4: Surrogate Recovery Summaries	22





## **Sample Summary**

Job No:

M92371

GEI Consultants, Inc.

Canton Airport Canton MA Project No: 09382-2

Sample Number	Collected Date	Time By	Received	Matr Code		Client Sample ID
M92371-1	06/16/10	08:20 SSH	06/18/10	so	Soil	093822-HS-AH-5
M92371-2	06/16/10	08:25 SSH	06/18/10	so	Soil	093822-HS-AI-5
M92371-3	06/16/10	08:30 SSH	06/18/10	so	Soil	093822-HS-AJ-5
M92371-4	06/16/10	08:35 SSH	06/18/10	so	Soil	093822-HS-AI-4
M92371-5	06/16/10	08:45 SSH	06/18/10	so	Soil	093822-HS-AU-8
M92371-6	06/16/10	09:00 SSH	06/18/10	so	Soil	093822-HS-AT.5-7.5
M92371-7	06/16/10	09:05 SSH	06/18/10	so	Soil	093822-HS-AT.5-6.5
M92371-8	06/16/10	09:10 SSH	06/18/10	so	Soil	093822-HS-AV-8
M92371-9	06/16/10	09:20 SSH	06/18/10	so	Soil	093822-HS-AV.5-15.5
M92371-10	06/16/10	09:25 SSH	06/18/10	SO	Soil	093822-HS-AV.5-15

Soil samples reported on a dry weight basis unless otherwise indicated on result page.





#### SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: GEI Consultants, Inc. Job No M92371

Site: Canton Airport Canton MA Report Date 7/8/2010 2:53:54 PM

6 Sample(s) were collected on 06/16/2010 and were received at Accutest on 06/18/2010 properly preserved, at 2.9 Deg. C and intact. These Samples received an Accutest job number of M92371. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

#### Extractables by GC By Method SW846 8082

Matrix SO Batch ID: OP21830

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M92268-23MS, M92268-23MSD were used as the QC samples indicated.
- MS/MSD Recovery(s) for Aroclor 1260 are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- M92371-1, M92371-2, M92371-3, M92371-5, M92371-6, M92371-9 for Decachlorobiphenyl, Tetrachloro-m-xylene: Outside control limits due to dilution.
- M92371-5 for Tetrachloro-m-xylene, Decachlorobiphenyl: Outside control limits due to possible matrix interference.
- M92371-1, M92371-6 for Decachlorobiphenyl: Outside control limits due to possible matrix interference.

#### Wet Chemistry By Method SM21 2540 B MOD.

Matrix	SO	Batch ID:	GN32236
Sample(s) M92	2360-2DUP were used as	the QC samples for	or Solids, Percent.
Matrix	SO	Batch ID:	GN32237
Sample(s) M92	2360-10DUP were used as	s the QC samples t	for Solids, Percent.

Sample(s) M92384-1DUP were used as the QC samples for Solids, Percent.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M92371).

Batch ID: GN32246



Matrix SO



<b>Sample Results</b>		
Report of Analysis		



## **Report of Analysis**

Client Sample ID: 093822-HS-AH-5

 Lab Sample ID:
 M92371-1
 Date Sampled:
 06/16/10

 Matrix:
 SO - Soil
 Date Received:
 06/18/10

 Method:
 SW846 8082
 SW846 3540C
 Percent Solids:
 91.6

Project: Canton Airport Canton MA

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF78097.D	1	07/02/10	SL	06/30/10	OP21830	GEF3504
Run #2	EF78247.D	10000	07/06/10	SL	06/30/10	OP21830	GEF3508

	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2	15.2 g	10.0 ml

#### **PCB** List

CAS No.	Compound	Result	RL	Units Q
12674-11-2	Aroclor 1016	ND	110	ug/kg
11104-28-2	Aroclor 1221	ND	110	ug/kg
11141-16-5	Aroclor 1232	ND	110	ug/kg
53469-21-9	Aroclor 1242	ND	110	ug/kg
12672-29-6	Aroclor 1248	ND	110	ug/kg
11097-69-1	Aroclor 1254	ND	110	ug/kg
11096-82-5	Aroclor 1260	1390000 a	1100000	ug/kg
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	84%	0% b	30-150%
877-09-8	Tetrachloro-m-xylene	<b>85</b> %	0% b	30-150%
2051-24-3	Decachlorobiphenyl	188% <sup>c</sup>	0% b	30-150%
2051-24-3	Decachlorobiphenyl	170% <sup>c</sup>	0% b	30-150%

- (a) Result is from Run# 2
- (b) Outside control limits due to dilution.
- (c) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



## **Report of Analysis**

Client Sample ID: 093822-HS-AI-5

 Lab Sample ID:
 M92371-2
 Date Sampled:
 06/16/10

 Matrix:
 SO - Soil
 Date Received:
 06/18/10

 Method:
 SW846 8082
 SW846 3540C
 Percent Solids:
 90.5

Project: Canton Airport Canton MA

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF78099.D	1	07/02/10	SL	06/30/10	OP21830	GEF3504
Run #2	EF78272.D	1000	07/06/10	SL	06/30/10	OP21830	GEF3508

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2	15.3 g	10.0 ml

#### **PCB List**

CAS No.	Compound	Result	RL	Units Q
12674-11-2	Aroclor 1016	ND	110	ug/kg
11104-28-2	Aroclor 1221	ND	110	ug/kg
11141-16-5	Aroclor 1232	ND	110	ug/kg
53469-21-9	Aroclor 1242	ND	110	ug/kg
12672-29-6	Aroclor 1248	ND	110	ug/kg
11097-69-1	Aroclor 1254	ND	110	ug/kg
11096-82-5	Aroclor 1260	308000 a	110000	ug/kg
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%	0% b	30-150%
877-09-8	Tetrachloro-m-xylene	<b>85</b> %	0% b	30-150%
2051-24-3	Decachlorobiphenyl	123%	0% b	30-150%
2051-24-3	Decachlorobiphenyl	140%	0% b	30-150%

- (a) Result is from Run# 2
- (b) Outside control limits due to dilution.

ND = Not detected

RL = Reporting Limit

**E** = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



## **Report of Analysis**

Client Sample ID: 093822-HS-AJ-5

 Lab Sample ID:
 M92371-3
 Date Sampled:
 06/16/10

 Matrix:
 SO - Soil
 Date Received:
 06/18/10

 Method:
 SW846 8082
 SW846 3540C
 Percent Solids:
 89.3

Project: Canton Airport Canton MA

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF78100.D	1	07/02/10	SL	06/30/10	OP21830	GEF3504
Run #2	EF78251.D	5000	07/06/10	SL	06/30/10	OP21830	GEF3508

	Initial Weight	Final Volume
Run #1	15.5 g	10.0 ml
Run #2	15.5 g	10.0 ml

#### **PCB** List

CAS No.	Compound	Result	RL	Units Q
12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5	Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	ND ND ND ND ND ND 729000 a	110 110 110 110 110 110 110 540000	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	92%	0% b	30-150%
877-09-8 2051-24-3	Tetrachloro-m-xylene Decachlorobiphenyl	79% 147%	0% b 0% b	30-150% 30-150%
2051-24-3	Decachlorobiphenyl	132%	0% b	30-150%

<sup>(</sup>a) Result is from Run# 2

 $ND = \ Not \ detected$ 

RL = Reporting Limit

**E** = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



C

<sup>(</sup>b) Outside control limits due to dilution.

## **Report of Analysis**

Client Sample ID: 093822-HS-AU-8

Lab Sample ID: M92371-5 **Date Sampled:** 06/16/10 **Matrix:** SO - Soil Date Received: 06/18/10 Method: SW846 8082 SW846 3540C Percent Solids: 92.9

**Canton Airport Canton MA Project:** 

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF78101.D	1	07/02/10	SL	06/30/10	OP21830	GEF3504
Run #2	EF78252.D	100000	07/06/10	SL	06/30/10	OP21830	GEF3508

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2	15.6 g	10.0 ml

#### **PCB** List

CAS No.	Compound	Result	RL	Units Q
12674-11-2	Aroclor 1016	ND	100	ug/kg
11104-28-2	Aroclor 1221	ND		ug/kg
11141-16-5	Aroclor 1232	ND	100	ug/kg
53469-21-9	Aroclor 1242	ND	100	ug/kg
12672-29-6	Aroclor 1248	ND	100	ug/kg
11097-69-1	Aroclor 1254	ND	100	ug/kg
11096-82-5	Aroclor 1260	25400000 a	10000000	ug/kg
CAS No.	<b>Surrogate Recoveries</b>	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	<b>76</b> %	0% b	30-150%
877-09-8	Tetrachloro-m-xylene	177% <sup>c</sup>	0% b	30-150%
2051-24-3	Decachlorobiphenyl	390% <sup>c</sup>	0% b	30-150%
2051-24-3	Decachlorobiphenyl	472% <sup>c</sup>	0% b	30-150%

- (a) Result is from Run# 2
- (b) Outside control limits due to dilution.
- (c) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



## **Report of Analysis**

Client Sample ID: 093822-HS-AT.5-7.5

Lab Sample ID: M92371-6 **Date Sampled:** 06/16/10 **Matrix:** SO - Soil Date Received: 06/18/10 Method: SW846 8082 SW846 3540C Percent Solids: 94.0

**Project: Canton Airport Canton MA** 

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF78102.D	1	07/02/10	SL	06/30/10	OP21830	GEF3504
Run #2	EF78253.D	10000	07/06/10	SL	06/30/10	OP21830	GEF3508

	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2	15.2 g	10.0 ml

#### **PCB** List

CAS No.	Compound	Result	RL	Units Q
12674-11-2	Aroclor 1016	ND	110	ug/kg
11104-28-2	Aroclor 1221	ND		ug/kg
11141-16-5	Aroclor 1232	ND	110	ug/kg
53469-21-9	Aroclor 1242	ND	110	ug/kg
12672-29-6	Aroclor 1248	ND	110	ug/kg
11097-69-1	Aroclor 1254	ND	110	ug/kg
11096-82-5	Aroclor 1260	3160000 a	1100000	ug/kg
CAS No.	<b>Surrogate Recoveries</b>	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	89%	0% b	30-150%
877-09-8	Tetrachloro-m-xylene	115%	0% b	30-150%
2051-24-3	Decachlorobiphenyl	299% c	0% b	30-150%
2051-24-3	Decachlorobiphenyl	239% <sup>c</sup>	0% b	30-150%

- (a) Result is from Run# 2
- (b) Outside control limits due to dilution.
- (c) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



## **Report of Analysis**

Page 1 of 1

Client Sample ID: 093822-HS-AV.5-15.5

Lab Sample ID: M92371-9 **Date Sampled:** 06/16/10 Matrix: SO - Soil Date Received: 06/18/10 Method: SW846 8082 SW846 3540C Percent Solids: 85.8

**Canton Airport Canton MA Project:** 

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF78103.D	1	07/02/10	SL	06/30/10	OP21830	GEF3504
Run #2	EF78254.D	250	07/06/10	SL	06/30/10	OP21830	GEF3508

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2	15.6 g	10.0 ml

#### **PCB** List

CAS No.	Compound	Result	RL	Units Q
12674-11-2	Aroclor 1016	ND	110	ug/kg
11104-28-2	Aroclor 1221	ND	110	ug/kg
11141-16-5	Aroclor 1232	ND	110	ug/kg
53469-21-9	Aroclor 1242	ND	110	ug/kg
12672-29-6	Aroclor 1248	ND	110	ug/kg
11097-69-1	Aroclor 1254	ND	110	ug/kg
11096-82-5	Aroclor 1260	131000 a	28000	ug/kg
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	<b>76</b> %	0% b	30-150%
877-09-8	Tetrachloro-m-xylene	<b>75</b> %	0% b	30-150%
2051-24-3	Decachlorobiphenyl	128%	0% b	30-150%
2051-24-3	Decachlorobiphenyl	118%	0% b	30-150%

- (a) Result is from Run# 2
- (b) Outside control limits due to dilution.

ND = Not detected

RL = Reporting Limit

**E** = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank





## Misc. Forms

## **Custody Documents and Other Forms**

#### Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody
- MCP Form
- Sample Tracking Chronicle



Chain-o	f-Custody Rec	ord			Labora	100		cutest				boratory use only)	30D #		M42371
		- 7				P	rojec	t Infor	mation	1000	4	2.5%	11666	- 2	
		Project Na	me: Canton	Airport	ort J				Project Location: Canton, MA					Page \of \	
(-	SEL CONSULTANTS	Project Nu	mber: 09382	2-2					Project Manager: Anne Leifer				·		
400 Unicorn Park Drive Send Repo							Preservative				N				
Woburn, MA 01801				, . 5										Sample Handling	
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ICP PRESU	MPTIVE CERTAINTY R	EQUIRED	YES N	10	·				soxlet					1	YES NO NA
Voc. Arc M	CP Analytical Methods R	oguirod?		(YES)	NO	NA	SAME I	V30300	S		İ				Sampled Shipped
	rinking Water Samples S	•		YES	(NO)	NA			by manual tion						With Ice
	You Met Minimum Field (		nte?	YES	NO	NA			ا ۾ ڇا						YES NO
Maria San	TOU MEET MINIMANT FIELD	20 (tequirente	Collec		1,60	1.00	45		PCBs by extraction						Super.
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-10	093822- H S - AV	カーバウ	1	0935	so	1	17	V	х						hold/freete
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elinquished by: (s	signature)	Date:	Time:	Received by:		, ,			CAUTIO	N- POTENT	AL ELEV	ATED PCBS			
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									L						6/14/2010

M92371: Chain of Custody Page 1 of 2





## ACCUTEST.

#### **Accutest Laboratories Sample Receipt Summary**

Laboratori	e s										
Accutest Job Number:	M92371	Clie	nt: GEI			Immediate Client Services Action Required:					
Date / Time Received:	6/18/2010 2:2	0:00 PM	No. Co	olers:	1	Client Service Act	ion Requir	ed at L	ogin:	No	
Project: CANTON AIRPO	ORT					Airbill #'s: N/A					
Cooler Security  1. Custody Seals Present: 2. Custody Seals Intact:	Y or N		C Present: Dates/Time OK	Y or	N	Sample Integrity - Documentation  1. Sample labels present on bottles: 2. Container labeling complete:	Y	or	<u>N</u>		
Cooler Temperature  1. Temp criteria achieved: 2. Cooler temp verification: 3. Cooler media:  Quality Control Preserv.	Ice	r N  ed gun (bag)  or N	N/A			3. Sample container label / COC agree:  Sample Integrity - Condition  1. Sample recvd within HT:  2. All containers accounted for:  3. Condition of sample:	<u>Y</u> _Y		<u>N</u>		
Trip Blank present / cook     Trip Blank listed on COC     Samples preserved prop     VOCs headspace free:	:		V			Sample Integrity - Instructions  1. Analysis requested is clear:  2. Bottles received for unspecified tests  3. Sufficient volume rec'd for analysis:	Y 			N/A	
Comments						4. Compositing instructions clear: 5. Filtering instructions clear:  1. Filtering instructions clear:  2. Filtering instructions clear:  3. Filtering instructions clear:				V	
Accutest Laboratories V:508.481.6200				495 Tech	hnology Cei F: 508.4	nter West, Bldg One 81.7753				arlborough, MA ww/accutest.com	

M92371: Chain of Custody Page 2 of 2





# Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup

BWSC-CAM	Exhibit VII A-1
21 May 2004	Revision No. 3.2
Final	Page 10 of 32

Title: MADEP MCP Response Action Analytical Report Certification Form

MADEP MCP Analytical Method Report Certification Form												
Laboratory I	Name:	Accutest Laboratorie	es of New England			Project #:	M92371					
Project Loca	oject Location:  Canton Airport Canton MA  MADEP RTN  None											
		tions for the following M92371-3,M92371-5		-9								
Sample Matri	ces:	Groundwater	Soil/Sediment X	Drinking Water	()	Other:	()		()			
MCP	SW-846	8260B ()	8151A ()	8330	()	6010B	()	7470A/1A	()			
Metho	ds Used	8270C ()	8081A ()	VPH	()	6020	()	9014M <sup>2</sup>	()			
As specified i	n MADEP	8082 (X)	8021B ()	EPH	()	7000 S <sup>3</sup>	()	7196A	()			
Compendium Analytical Me (Check all		1 List Release Trackin 2 M - SW-846 Method 3 S - SW-846 Methods	9014 or MADEP Phys	iologically Available	•	, ,						
An af	An affirmative response to questions A, B, C, and D is required for "Presumptive Certainty status											
that de	escribed on the	eived by the laborator Chain-of-Custody do	cumentation for the	data set?		<b>√</b>	Yes	☐ No ¹				
B includ	ed in this report	edures required for the followed, including the QC data that did not es?	ne requirement to no	te and		V	Yes	□ No ¹				
C for "Pr (d) of	esumptive Cert	ed in this report meet ainty", as described in cument CAM VII A, "C r the Acquisition and	n Section 2.0 (a), (b) Quality Assurance ar	, (c) and d Quality		V	Yes	□ No ¹				
1 1		ods only: Was the VF ns, as specified in Se		un without		V	Yes	□ No ¹				
A res	ponse to quest	tions E and F below	is required for "Pr	esumptive Certa	inty'	" status						
	all QC performatied methods ac	ance standards and re	ecommendations for	the		Refer to Narrative	Yes	☑ No ¹				
F Were		nalyte-list compounds	/elements for the sp	ecified		Refer to Narrative	Yes	□ No ¹				
<sup>1</sup> All Ne	egative respon	ses must be addres	sed in an attached	Environmental L	.abo	ratory case narra	tive.					
inquiry of t	hose responsi	under the pains and ble for obtaining the best of my knowled	information, the n	naterial containe	d in							
Signature:	p	go fall		Position:	Lak	poratory Director						
Printed Nar	ne:	Reza Tand		Date:		07/08/2010						



## **Internal Sample Tracking Chronicle**

GEI Consultants, Inc.

Job No: M92371

Canton Airport Canton MA Project No: 09382-2

Sample Number	Method	Analyzed	Ву	Prepped	Ву	Test Codes
M92371-1 093822-HS	Collected: 16-JUN-10 ( -AH-5	08:20 By: SSH	Receiv	ved: 18-JUN-	10 By:	JB
M92371-1	SM21 2540 B MOD. SW846 8082 SW846 8082	25-JUN-10 02-JUL-10 05:27 06-JUL-10 06:27		30-JUN-10 30-JUN-10		%SOL P8082SOXHLET P8082SOXHLET
M92371-2 093822-HS	Collected: 16-JUN-10 ( -AI-5	08:25 By: SSH	Receiv	ved: 18-JUN-	10 By:	JB
M92371-2	SM21 2540 B MOD. SW846 8082 SW846 8082	25-JUN-10 02-JUL-10 06:26 06-JUL-10 18:59	BF SL SL	30-JUN-10 30-JUN-10		%SOL P8082SOXHLET P8082SOXHLET
M92371-3 093822-HS	Collected: 16-JUN-10 ( -AJ-5	08:30 By: SSH	Receiv	ed: 18-JUN-	10 By:	JB
M92371-3	SM21 2540 B MOD. SW846 8082 SW846 8082	25-JUN-10 02-JUL-10 06:41 06-JUL-10 07:56	BF SL SL	30-JUN-10 30-JUN-10		%SOL P8082SOXHLET P8082SOXHLET
M92371-5 093822-HS	Collected: 16-JUN-10 ( -AU-8	08:45 By: SSH	Receiv	ved: 18-JUN-	10 By:	JB
M92371-5	SM21 2540 B MOD. SW846 8082 SW846 8082	25-JUN-10 02-JUL-10 06:56 06-JUL-10 08:11	BF SL SL	30-JUN-10 30-JUN-10		%SOL P8082SOXHLET P8082SOXHLET
M92371-6 093822-HS	Collected: 16-JUN-10 ( -AT.5-7.5	09:00 By: SSH	Receiv	ved: 18-JUN-	10 By:	JB
M92371-6	SM21 2540 B MOD. SW846 8082 SW846 8082	25-JUN-10 02-JUL-10 07:25 06-JUL-10 08:26	BF SL SL	30-JUN-10 30-JUN-10		%SOL P8082SOXHLET P8082SOXHLET
M92371-9 093822-HS	Collected: 16-JUN-10 ( -AV.5-15.5	09:20 By: SSH	Receiv	ved: 18-JUN-	10 By:	JB
	SM21 2540 B MOD. SW846 8082	25-JUN-10 02-JUL-10 07:40	CF SL	30-JUN-10	AF	%SOL P8082SOXHLET

## **Internal Sample Tracking Chronicle**

GEI Consultants, Inc.

Job No: M92371

Canton Airport Canton MA Project No: 09382-2

Sample Number	Method	Analyzed	Ву	Prepped	Ву	Test Codes
M92371-9	SW846 8082	06-JUL-10 08:55	SL	30-JUN-10	AF	P8082SOXHLET



## **GC Semi-volatiles**

## **QC Data Summaries**

## Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method: SW846 8082

## **Method Blank Summary**

2051-24-3 Decachlorobiphenyl

Job Number: M92371

Account: GEI GEI Consultants, Inc.
Project: Canton Airport Canton MA

Sample OP21830-MB	File ID EF78078.D	DF 1	Analyzed 07/01/10	By SL	Prep Date 06/30/10	Prep Batch OP21830	Analytical Batch GEF3504

The QC reported here applies to the following samples:

M92371-1, M92371-2, M92371-3, M92371-5, M92371-6, M92371-9

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	99	ug/kg	
11104-28-2	Aroclor 1221	ND	99	ug/kg	
11141-16-5	Aroclor 1232	ND	99	ug/kg	
53469-21-9	Aroclor 1242	ND	99	ug/kg	
12672-29-6	Aroclor 1248	ND	99	ug/kg	
11097-69-1	Aroclor 1254	ND	99	ug/kg	
11096-82-5	Aroclor 1260	ND	99	ug/kg	
CAGN	G A D		т		
CAS No.	Surrogate Recoveries		Limi	ts	
877-09-8	Tetrachloro-m-xylene	99%	30-15	50%	
877-09-8	Tetrachloro-m-xylene	102%	30-15	50%	
2051-24-3	Decachlorobiphenyl	103%	30-15	<b>50</b> %	
	_ ,, ,, <sup>*</sup> , <sup>*</sup> ,				

117%

30-150%



Method: SW846 8082

## Blank Spike/Blank Spike Duplicate Summary

Job Number: M92371

2051-24-3 Decachlorobiphenyl

Account: GEI GEI Consultants, Inc.
Project: Canton Airport Canton MA

The QC reported here applies to the following samples:

M92371-1, M92371-2, M92371-3, M92371-5, M92371-6, M92371-9

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1	Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	260 260	313 ND ND ND ND ND ND 330	121 127	337 ND ND ND ND ND ND 348	129 133	7 nc nc nc nc nc 5	40-140/30 40-140/30 40-140/30 40-140/30 40-140/30 40-140/30
CAS No.	Surrogate Recoveries	BSP	BSI	D	Limits			
877-09-8 877-09-8 2051-24-3	Tetrachloro-m-xylene Tetrachloro-m-xylene Decachlorobiphenyl	108% 115% 113%	113 120 118	%	30-150% 30-150% 30-150%	6		

130%

30-150%

126%



Method: SW846 8082

## Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M92371

Account: GEI GEI Consultants, Inc.
Project: Canton Airport Canton MA

Sample OP21830-MS OP21830-MSD M92268-23	File ID EF78081.D EF78082.D EF78083.D	DF 1 1	Analyzed 07/01/10 07/01/10 07/02/10	By SL SL SL	Prep Date 06/30/10 06/30/10 06/30/10	Prep Batch OP21830 OP21830 OP21830	Analytical Batch GEF3504 GEF3504 GEF3504
M92268-23	EF78083.D	1	07/02/10	SL	06/30/10	OP21830	GEF3504
M92268-23	EF78245.D	10	07/06/10	SL	06/30/10	OP21830	GEF3508

The QC reported here applies to the following samples:

M92371-1, M92371-2, M92371-3, M92371-5, M92371-6, M92371-9

CAS No.	Compound	M92268-23 ug/kg Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
	Aroclor 1016 Aroclor 1221	ND ND	289	340 ND	118	370 ND	122	8 nc	40-140/50 40-140/50
	Aroclor 1232 Aroclor 1242	ND ND		ND ND		ND ND		nc nc	40-140/50 40-140/50
11097-69-1	Aroclor 1248 Aroclor 1254	529 5530 <sup>a</sup>		579 1980		704 2540		19 25	40-140/50 40-140/50
11096-82-5	Aroclor 1260	2510 a	289	1440	-370* b	1840	-221* b	24	40-140/50
CAS No.	Surrogate Recoveries	MS	MSD	M92	2268-23	M92268	-23 Lir	nits	
877-09-8	Tetrachloro-m-xylene	97%	92%	1019	%	137%	30-	150%	
877-09-8	Tetrachloro-m-xylene	95%	<b>85</b> %	98%	, )	130%	30-	<b>150</b> %	
2051-24-3	Decachlorobiphenyl	121%	120%	1279	%	177%* (	30-	150%	
2051-24-3	Decachlorobiphenyl	112%	110%	130	%	169%*	30-	<b>150</b> %	

<sup>(</sup>a) Result is from Run #2.

<sup>(</sup>b) Outside control limits due to high level in sample relative to spike amount.

<sup>(</sup>c) Outside control limits due to dilution.

## **Semivolatile Surrogate Recovery Summary**

Job Number: M92371

Account: GEI GEI Consultants, Inc.
Project: Canton Airport Canton MA

Method: SW846 8082 Matrix: SO

Samples and QC shown here apply to the above method

Lab	Lab				
Sample ID	File ID	S1 a	S1 b	S2 a	S2 b
M92371-1	EF78247.D	0.0* c	0.0* c	0.0* c	0.0* c
M92371-1	EF78097.D	84.0	85.0	188.0* d	170.0* d
M92371-2	EF78272.D	0.0* c	0.0* c	0.0* c	0.0* c
M92371-2	EF78099.D	87.0	85.0	123.0	140.0
M92371-3	EF78251.D	0.0* c	0.0* c	0.0* c	0.0* c
M92371-3	EF78100.D	92.0	79.0	147.0	132.0
M92371-5	EF78252.D	0.0* c	0.0* c	0.0* c	0.0* c
M92371-5	EF78101.D	76.0	177.0* d	390.0* d	472.0* d
M92371-6	EF78253.D	0.0* c	0.0* c	0.0* c	0.0* c
M92371-6	EF78102.D	89.0	115.0	299.0* d	239.0* d
M92371-9	EF78254.D	0.0* c	0.0* c	0.0* c	0.0* c
M92371-9	EF78103.D	76.0	75.0	128.0	118.0
OP21830-BS	EF78079.D	108.0	115.0	113.0	126.0
OP21830-BSD	EF78080.D	113.0	120.0	118.0	130.0
OP21830-MB	EF78078.D	99.0	102.0	103.0	117.0
OP21830-MS	EF78081.D	97.0	95.0	121.0	112.0
OP21830-MSD	EF78082.D	92.0	85.0	120.0	110.0

Surrogate Recovery Compounds Limits

S1 = Tetrachloro-m-xylene 30-150% S2 = Decachlorobiphenyl 30-150%

- (a) Recovery from GC signal #1
- (b) Recovery from GC signal #2
- (c) Outside control limits due to dilution.
- (d) Outside control limits due to possible matrix interference.